

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Amendment of Parts 1, 21 and 74 to)
Enable Multipoint Distribution)
Service and Instructional Television)
Fixed Service Licensees To Engage in)
Fixed Two-Way Transmissions)

MM Docket No. 97-217

File No. RM-9060

Comments of the Corporation for Public Broadcasting,
Association of America's Public Television Stations, and
Public Broadcasting Service

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Summary

The Corporation for Public Broadcasting (“CPB”), Association of America’s Public Television Stations (“APTS”), and Public Broadcasting Service (“PBS”) urge the adoption of the proposed rules to allow for greater flexibility in providing two-way instructional television fixed service (“ITFS”) transmissions. ITFS stations are intended primarily to provide formal educational and cultural development to students enrolled in accredited public and private schools, colleges, and universities. CPB, APTS, and PBS support the proposed amendments because they will facilitate the provision of educational and cultural programming.

Across the country, public television stations and statewide educational networks hold ITFS licenses. The public television community uses ITFS to foster education in a variety of innovative ways which benefit students. However, much more can be done if the Commission amends its rules to allow ITFS licensees to implement two-way transmission service more easily.

While CPB, APTS, and PBS fully support easing the regulatory environment for ITFS licensees, special attention must be paid to the effects of any amendment on the continued success of ITFS licensees. The FCC must be vigilant in its deliberations to ensure that the amendments, which are meant to improve service, do not cause unintended negative results such as increased licensee costs, delayed service and a subsequent loss of educational programming. CPB, APTS, and PBS ask that the FCC remain mindful that its rules will affect educational institutions and nonprofit corporations.

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Comments of the Corporation for Public Broadcasting,
Association of America's Public Television Stations, and
Public Broadcasting Service

The Corporation for Public Broadcasting ("CPB"), Association of America's Public Television Stations ("APTS"), and Public Broadcasting Service ("PBS") hereby submit their comments in response to the Notice of Proposed Rulemaking ("NPRM")¹ released October 10, 1997, in the above referenced proceeding by the Federal Communications Commission ("FCC" or "Commission"). CPB, APTS, and PBS urge the adoption of the proposed rules to allow for greater flexibility in providing two-way instructional television fixed service ("ITFS") transmissions. Two-way transmission will aid the educational and cultural development of students served by ITFS licensees nationwide. However, CPB, APTS, and PBS also ask that the Commission remain cognizant that ITFS licensees are, above all, noncommercial educational programmers. As such, ITFS licensees frequently find

1. In the Matter of Amendment of Parts 1, 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, Notice of Proposed Rulemaking, MM Docket No. 97-217, FCC 97-360, Adopted October 7, 1997, Released October 10, 1997.

themselves in precarious financial positions due to their status as nonprofit entities. Careful consideration should be given to the effects of the amended rules on licensees, to ensure that the changes allow two-way ITFS services to flourish, and not wither as a result of unintended administrative consequences such as increased costs and lengthy regulatory delay.

I. Introduction.

CPB is the private, nonprofit corporation authorized by the Public Broadcasting Act of 1967,² to facilitate and promote a national system of public telecommunications. APTS and PBS are nonprofit organizations that represent nearly all of the nation's 177 noncommercial educational television licensees. APTS represents public television stations in legislative and policy matters before the FCC, Congress, and the Executive Branch. Additionally, it engages in planning and research activities on behalf of its members. PBS provides program distribution and other services to its members. PBS is also a leader in the development of new and improved television technologies and frequently speaks for the public television community in matters relating to the use of television broadcast spectrum.

Pursuant to its authority, CPB has provided millions of dollars of grant monies for support and development of the public broadcasting stations, and for the production of instructional and educational television programs for use in schools. The myriad of instructional and educational programming funded by CPB and the

2. 47 U.S.C. § 390 et. seq.

Annenberg/CPB project³ are distributed to students through a wide variety of electronic delivery systems used by the stations, including multipoint microwave transmission systems such as ITFS. CPB has also allocated funds specifically for the development of ITFS technology, programming and distribution at APTS's and PBS's member stations. Thus, CPB, APTS, and PBS have a direct interest in ensuring that the Commission's rules maximize the provision of educational programming to millions of students through ITFS.

II. The FCC Should Adopt its Proposed Rules to Allow for Greater Flexibility for ITFS Licensees Providing Two-Way Transmissions.

ITFS stations are intended primarily to provide formal educational and cultural development in aural and visual form to students enrolled in accredited public and private schools, colleges, and universities.⁴ Therefore, when amending its rules concerning ITFS operations, the Commission must be guided by its own pronouncement as to the purpose of ITFS service — providing educational and cultural development. In its deliberations concerning the ITFS rules, the Commission must consider whether the proposed amendments not only expand potential multipoint distribution service ("MDS") and ITFS service offerings, but also concurrently benefit the provision of educational and cultural programming. In fact, the Commission itself has recognized that "[t]he clear and guiding principle

3. The Annenberg/CPB project is a division of CPB.

4. 47 C.F.R. § 74.931(a)(1).

in this consideration [of amending ITFS rules] is that the primary purpose of ITFS was at its founding and remains to serve formal academic needs.”⁵

In the instant proceeding, the NPRM proposes to relax the FCC’s rules to give MDS and ITFS providers greater flexibility to deliver two-way transmissions.⁶ In proposing the amended rules, the Commission stated that one of its goals in instituting this procedure is to provide benefits to the educational community.⁷ CPB, APTS, and PBS support the proposed amendments because they will further the purposes for which ITFS service was created — facilitating the provision of educational and cultural programming. As the Commission recognizes, the proposed rule changes provide MDS and ITFS licensees with the ability to exploit digital technology more easily.⁸ Through the use of digital technology, including Internet access, students will benefit through increased and improved opportunities to receive educational programming, and the Commission’s goals in creating ITFS will be served.

5. In the Matter of Amendment of Part 74 of the Commission’s Rules and Regulations in Regard to the Instructional Television Fixed Service, Second Report and Order, 58 Rad. Reg. 2nd (P&F) 559, 579 (1985).

6. NPRM at ¶¶ 7-8.

7. Id. at ¶ 2.

8. Id. at ¶ 8.

A. Public Television Stations Nationwide Use ITFS to Educate America's Students.

Across the country, public television stations and statewide educational networks hold ITFS licenses. The public television community uses ITFS to foster education in a variety of innovative ways which benefit students. Teachers can supplement their lessons through video-on-demand services. Students in rural areas, where small populations limit class offerings, can receive advanced classes through ITFS distance learning courses. In sum, public television's use of ITFS demonstrates that the educational goals for which the spectrum was set aside are being met.

Examples of public television's commitment to using ITFS technology for education abound. The South Carolina Educational Television Commission ("South Carolina ETV"), for example, holds 152 ITFS licenses. South Carolina's local school districts use the ITFS licenses to operate distance learning centers across the state. Currently, South Carolina has twenty-nine operational distance learning centers that blanket the state and serve individual school districts, or are shared between school districts or rural counties. Six more distance learning centers are under construction. The local school districts produce their own programming such as instructional courses, staff development and training, and staff meetings. Similarly, the Wisconsin Educational Communications Board ("Wisconsin ETV") holds sixty-two ITFS licenses and distributes programming and ad hoc satellite events for school districts in various parts of the state. Mississippi ETV is one of four partners in Mississippi's non-profit ITFS corporation, Mississippi Ednet

Institute, Inc., which is licensed to operate twenty statewide ITFS channels.⁹

Individual stations also serve students through ITFS use. KUAT, the public television station operated by the University of Arizona, operates sixteen ITFS channels to distribute credit courses, medical programming, and video conferences. These channels also transmit courses from Pima Community College and the Tucson Unified School District. Thus, students at all levels of education, from primary to post-graduate, can receive educational programming. WFYI-TV in Indianapolis currently utilizes an ITFS system for the distribution of educational program services within central Indiana. WITF in Harrisburg, Pennsylvania operates sixteen ITFS channels that offer credit-based programming to area businesses, hospitals, colleges and an intermediate unit of the Pennsylvania Department of Education. WNEO in Youngstown, Ohio operates an ITFS system that delivers instructional programming and staff development to area schools. WNEO also holds a construction permit for an ITFS facility in Akron, Ohio, and plans to offer similar services there. WMVS in Milwaukee, Wisconsin maintains ITFS channels for use as daily instructional links to the multiple campus sites and learning centers of the Milwaukee Area Technical College. KLVX in Las Vegas maintains sixteen ITFS channels to serve Las Vegas, Boulder City, and Parhump, Nevada. KLVX delivers over fifty hours of ITFS programming per channel to over

9. In response to the NPRM, Mississippi ETV transmitted a memorandum to APTS which extensively discussed its position concerning the proposed rules. As the memorandum is relevant to this proceeding, a copy of Mississippi ETV's transmittal has been attached to these comments as Attachment 1.

170 schools each week. This programming includes foreign language, math, science, adult continuing education, professional development, high school completion ("GED") programming, English as a second language classes, basic literacy, technology assistance, classroom management, support staff training, and distance learning courses.

In Miami, WLRN-TV provides video services to the entire Dade County Public School system, which includes over 300 schools, via twenty ITFS channels. WLRN-TV's "Teacher Choice" program allows teachers to order play-on-demand video programming for their classrooms by calling the Video Library Manager on a touch-tone telephone. In addition to scheduling programming up to a week in advance, teachers can review the current video schedule for a particular title to determine if an existing time meets their needs. By December 17, 1996, in only its fourth month of operation, the Teacher's Choice program had aired or scheduled over 3,000 hours of requested educational programs. Teachers always have access to over 600 programs, and the program library is updated every two months.

Other public broadcasters that use ITFS licenses to broadcast educational programming are filing separate comments in this docket with the Commission.¹⁰ CPB, APTS, and PBS endorse the individual stations' comments and believe that these comments and the pleadings made by the stations demonstrate an unsurpassed record of public television stations using ITFS technology to educate

10. See for example the Comments to Proposed Rulemaking filed by Public Television 19, Inc., Kansas City Public Television.

America's students at all levels.

B. Amending the Rules to Ease ITFS Licensees' Ability to Utilize Two-Way Transmissions Will Allow Public Broadcasters to Improve and Expand Their ITFS Services.

The exemplary record that public broadcasters have produced using ITFS technology illustrates how students can benefit under the current rules. However, much more can be done if the Commission amends its rules to allow ITFS licensees greater flexibility in implementing two-way transmission service. Under the amended rules, ITFS stations could not only air educational programming, but also receive immediate feedback more easily. Students could ask questions of teachers in distance learning classes. Staff members could share ideas and experiences during staff development seminars. The stations would also conserve resources by providing two-way service between program distributor and recipient instead of relying on others, such as telephone service providers, to receive feedback.

South Carolina ETV would use two-way service to provide educational interactivity during presentations, not only between instructor and student, but also between schools in different districts or counties. KUAT, at the University of Arizona, would incorporate interactivity to enhance the success of ITFS distance learning. Wisconsin ETV believes that improved two-way capabilities will make ITFS more attractive to schools not currently participating in its ITFS system, and thereby increase its use. WFYI-TV would use two-way transmissions to offer two-way data services, and to expand their current wireless services to include

interactive electronic field trips to classrooms. WNEO would like to offer two-way conferencing applications between schools or other points using video or data. In sum, public broadcasting believes that interactivity will vastly improve the educational process in the distance learning environment.

Improved two-way transmission ability will also allow stations to conserve resources. For instance, in Miami, teachers use touch-tone phones to order educational programming from WLRN-TV's Teacher's Choice program. With two-way transmission ability, the teachers at the receive stations could use the ITFS system itself to order their programs, thereby alleviating the need for additional phone services. Similarly, Wisconsin ETV, which has operated its ITFS system for fourteen years, notes that there has been a movement away from ITFS to two-way fiber optic networks with interactive capabilities during the last six years. The increased ability to utilize two-way transmissions will help ITFS licensees provide programming to the educational market more efficiently, and compete with the fiber optic network providers. Under amended rules, ITFS licensees will be able to distribute educational materials effectively, and save precious resources, while increasing students' ability to learn from, and interact with, teachers miles away.

III. In Its Attempts to Improve the Regulatory Environment for MDS and ITFS Licensees, the Commission Should Be Mindful that ITFS Licensees Are Educational Institutions and Nonprofit Organizations.

While CPB, APTS, and PBS fully support the Commission's attempts to ease the regulatory environment for ITFS licensees, special attention must be paid to the

effects of any amendment on the continued success of ITFS licensees. By setting aside spectrum in 1963 specifically for educational use, the Commission recognized the value of spectrum specifically designed to supplement formal education.¹¹ The FCC must be vigilant in its deliberations to ensure that the amendments proposed in the NPRM, which are meant to improve service, do not cause unintended negative results such as increased licensee costs, delayed service and a subsequent loss of educational programming. Administrative regulations could increase costs for ITFS licensees and delay the provision of two-way ITFS service, as demonstrated by application of two types of rules — comment periods for applications and notification requirements for subsequent switching between services.

Of course, the comments of CPB, APTS, and PBS regarding the proposed rules assume that the spectrum allocated to ITFS licensees will be protected, maintained and shielded from interference under the amended rules. While the Commission has not made any overtures to decrease the amount of spectrum available for ITFS use, CPB, APTS, and PBS would vigorously oppose any such diminution.¹²

11. In the Matter of Amendment of Parts 2 and 4 of the Commission Rules and Regulations to Establish a New Class of Educational Television Service for the Transmission of Instructional and Cultural Material to Multiple Receiving Locations on Channels in the 1990-2110 Mc/s or 2500-2690 Mc/s Frequency Band, Report and Order, 25 Rad. Reg. (P&F) 1785 (1963).

12. For a more extensive discussion of measures to protect current ITFS licensees, see the Joint Comments filed by Schwartz, Woods and Miller in this docket. CPB, APTS, and PBS believe that the comments submitted by Schwartz, Woods and Miller propose sensible rationales for protecting ITFS licensees, and endorse these comments.

A. Amending the Rules Could Result in Increased Costs to ITFS Licensees.

One impact that the amended rules may have is on the cost of compliance. A careful study must be conducted to ensure that the amended rules do not result in an increase in administrative costs for ITFS licensees. By rule, ITFS licensees must be accredited educational institutions, or government or nonprofit organizations.¹³ Given the nonprofit status of these entities, applicants for ITFS licenses possess limited financial resources, and frequently depend on government budgets for funding. Thus, many licensees do not have the cash or asset reserves to engage in long-term legal proceedings before the Commission in an effort to acquire or modify an ITFS authorization. The current application process recognizes the limited financial resources of ITFS licensees by not requiring a filing fee. CPB, APTS, and PBS urge the Commission to continue its commitment to keeping administrative costs associated with ITFS applications to a minimum.

The Commission has proposed an application process that allows for a sixty day public comment and FCC staff review of applications.¹⁴ The Commission also proposed a special one-time transition filing window to process applications filed immediately upon the effective date of the amended rules. This one-time transition process includes two sixty day periods: one for applicants to resolve conflicts among

13. 47 C.F.R. § 74.932(a).

14. NPRM at ¶ 52.

themselves; and a second period for traditional public comment.¹⁵ In developing its rules to implement the application process, the FCC should remain aware that any petition to deny will launch a pleading cycle with legal costs to applicants. While public comment is appropriate, the Commission should tailor its rules to minimize legal or other administrative costs for ITFS applicants during the application process. If the amended rules create a perception that financial costs associated with an ITFS application will be high, potential licensees may be reluctant to provide needed services.

Similarly, the Commission sought comment concerning a notification requirement for MDS and ITFS licensees switching between common carrier and non-common carrier services.¹⁶ The FCC certainly has a legitimate interest in monitoring which licensees are providing different types of service. However, the Commission must also be aware that filing such notifications requires expending additional resources. Even if an ITFS licensee does not employ outside counsel to prepare a filing, it must devote employee time to the project. These costs can accumulate rapidly, especially if a licensee is engaging in activity that requires frequent filings (such as switching between common carrier and non-common carrier service). While CPB, APTS, and PBS do not oppose a notice requirement for switching between common and non-common carrier service, they believe the notice requirement demonstrates how regulations can increase costs to ITFS

15. *Id.* at ¶ 56.

16. *Id.* at ¶ 57.

licensees, and they urge the FCC to consider the financial implications of each new procedure it adopts.

B. Amending the Rules Could Also Unintentionally Hamper Two-Way ITFS Service Due to Administrative Delay.

The Commission should also carefully consider the real world timing effects of its decisions. Obviously, the administrative process requires time for processing applications to ensure a working, interference-free ITFS system. However, the administrative process could hamper the development of two-way ITFS transmission systems with unnecessary delay from regulation. For instance, ITFS systems transmit educational programming to benefit students who are enrolled in courses that are offered for specific academic terms. ITFS licensees will propose two-way transmissions for specific classes. Every delay in ITFS station application processing also delays service to the students. A lengthy processing period could result in an academic course finishing before the ITFS station has the authority to offer the two-way transmission intended for the class.

ITFS station managers do not develop academic course schedules at academic institutions. They may not have the ability to plan more than one academic term in advance to seek authorization to commence two-way transmissions. The Commission should be aware in its deliberations that ITFS stations may be subject to outside forces in their program scheduling, and may not be able to compensate for regulatory lag-time by filing applications well in advance of the need for two-way transmission ability. To allow ITFS stations the most flexibility in planning two-

way transmissions, CPB, APTS, and PBS endorse a sixty day public notice period for processing ITFS applications. Any longer period for public comment¹⁷ would mean that two-way transmission applications would be effectively “on hold” for an entire academic term. ITFS stations would potentially be forced to file applications proposing two-way transmissions more than one term in advance. Because ITFS station managers may not have the ability to file so far in advance, a public comment period longer than sixty days could seriously hamper ITFS stations’ ability to provide two-way transmissions.

Similarly, once an ITFS station is licensed to provide two-way services, subsequent conversions between two-way and one-way transmission should not require formal application and public notice periods. The stations must be able to respond to requests for service without additional procedural roadblocks. Since the FCC will address concerns regarding interference during initial two-way transmission licensing, there is no need for a formal application and public notice for an ITFS licensee to switch subsequently between one and two-way transmissions. CPB, APTS, and PBS would therefore oppose formal application and public comment periods for an ITFS station seeking to switch back and forth between one and two-way transmissions, once the station is licensed to provide two-way service.

In sum, CPB, APTS, and PBS ask the Commission to remain cognizant of the real world effects of amending the ITFS rules. The licensees do not have unlimited

17. The Commission stated it would consider an initial comment period of 120 days for two-way service proposals as a potential alternative to its proposed sixty day comment period at ¶ 52 of the NPRM.

funds. The material that ITFS licensees broadcast is frequently time sensitive due to academic calendars, and excessive delay could make programming obsolete.

Educational programming is a valuable commodity, and in amending its rules, the FCC should fashion a regulatory environment where ITFS stations can quickly and economically provide two-way transmissions to respond to students' needs.

IV. Conclusion.

CPB, APTS, and PBS endorse the Commission's plan to amend its rules to allow ITFS licensees more flexibility in offering two-way transmissions. Educational broadcasters will benefit from these amendments, as the services they provide will be improved and expanded. More importantly, students will benefit as the new and improved services become available. The NPRM proposes rules that will benefit education, and for that reason, we urge the Commission to adopt the amendments. CPB, APTS, and PBS ask, though, that the FCC remain mindful of the practical ways in which its rules will affect educational institutions and nonprofit corporations.

WHEREFORE, the Corporation for Public Broadcasting, Association of America's Public Television Stations, and Public Broadcasting Service respectfully urge the Commission to consider carefully the proposals made in the NPRM, and adopt the rules that will best enable ITFS licensees to provide two-way transmissions more effectively.

Respectfully submitted,

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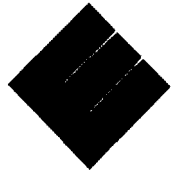
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January 8, 1998

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MEMORANDUM

To: Ms. Lonna Thompson, APTS
From: Larry Miller, Executive Director
Mississippi ETV
Subject: FCC Rulemaking Proposal
Date: 12-4-97

As the state agency which is primarily responsible for Mississippi's educational television programming, Mississippi ETV appreciates the opportunity of commenting on the FCC's Notice of Proposed Rule Making concerning the enabling of MDS, MMDS, and ITFS licensee to engage in fixed two-way transmission. Mississippi ETV is also one of four educational partners in Mississippi's non-profit ITFS corporation: Mississippi EdNet Institute, Inc. The other three partners/license holders are: 1) the Institutions of Higher Learning (four-year universities) 2) the State Board for Community and Junior Colleges and 3) the State Board of Education. Consequently, ETV has an even more focused concern about the potential affects of this rulemaking proposal.

Currently, EdNet partners are licensed to operate 20 statewide ITFS channels. The four member consortium has leased 15 of its ITFS channels to Wireless One, which is a private wireless cable company. Of the remaining five ITFS channels, one is narrowcasting in the four county Jackson "cell." There are ten other "cells" throughout the state which will begin to narrowcast ITFS programming some time in the fall of 1998 (to 96% of Mississippi's population).

The build-out of EdNet's statewide interactive ITFS system is proceeding on a step-by-step basis. It is anticipated that at least two of EdNet's five ITFS channels will be operating on an interactive statewide basis by the middle of 1998. EdNet's attention is focused on that build-out process and on the programming of its five ITFS channels. In the event our wireless cable "partner" proposes to provide certain two-way information services, our response would be one of both enthusiasm and caution.

Mississippi EdNet benefits from those Wireless One services which increase its subscriber base. EdNet's operating budget is primarily supported by per-subscriber royalties which are based on Wireless One's monthly subscriber totals. EdNet anticipates that certain services such as high-speed Internet access and/or telephone/data services would prompt more Mississippians to subscribe to Wireless One. In that regard, Mississippi ETV agrees with and endorses the FCC's approach to assisting the competitive appeal of wireless cable in the marketplace.

While we are cautiously optimistic about expanding the base of financial support for EdNet's statewide educational efforts, there are several potential problems inherent within the current proposal to incorporate two-way service or "cellularization" into EdNet's ITFS structure. First and foremost is the potential for signal interference.

Mississippi ETV looks toward the FCC for even more oversight of technical parameters which will insure interference-free service for all of Mississippi's ITFS viewers. This FCC oversight and review process should be just as stringent and comprehensive as that applied to all other broadcaster services such as digital TV, etc.

EdNet would not enter into any agreement which would in any way jeopardize the ability of Mississippians to clearly and conveniently receive and interact with its five dedicated ITFS channels. While the FCC's Notice of Proposed Rulemaking states that "the rules do not obligate ITFS licensees to take part in the two-way system, enter into a lease agreement, file FCC applications, or accept harmful signal levels," Mississippi ETV wants to underscore its concern for maintaining complete ITFS signal integrity.

As they relate to any two-way communications or "cellularization," Mississippi ETV urges the FCC to review any and all license filings, lease agreements, and other requests for actions by the wireless cable industry which can adversely affect ITFS license holders. We urge the Commission to continue and increase its role as an advocate for the continued use of instructional television, not at the expense of the wireless cable industry but in addition to its enhancing the public/private partnership. To that end, Mississippi ETV endorses the proposal by the law firm of Schwartz, Woods, & Miller (SWM).

"SWM also proposed that in order to protect the rights of incumbent ITFS licenses, the Commission require that leases approved or submitted under the previous rules 'be amended to make clear that the wireless cable lessee and the ITFS licensee have together considered the rule changes adopted and made any appropriate changes to lease terms, prior to the commencement of commercial operations on the frequencies using cellularization, sectorization or differing channelization plans.'"

Mississippi ETV also requests that the FCC be responsible for notifying ITFS licensees of any and all modification applications, instead of notification coming from the applicant. This would better assure that the ITFS licensees would have adequate time to respond to any and all modification applications.

While we are not sure how the proposed "rolling one-day filing window system" would work, ETV is concerned that any significant increase in the speed of the application process might present undue pressure on ITFS licensees. Unless it can be clearly demonstrated that the increase in the speed of the application process will not jeopardize the integrity of any and all ITFS systems, Mississippi ETV proposes that the FCC "retain the current periodic filing window system for ITFS."

Given its current channel configuration, Mississippi EdNet would not benefit from any adjustments to the current ITFS average weekly programming requirements. We do not see any compelling reason to adopt the Petitioners' changes which

"would revise the absolute 20 hours per channel per week recapture time requirement to provide that the ITFS programming requirements constitute a total of 40 hours per channel per week, recapture time."

Mississippi ETV believes that appropriate data transmission should count towards minimum ITFS programming requirements. Certain uses of data such as high-speed Internet-provided courses are instructional. Such educational services could be counted against ITFS programming requirements on an hour-by-hour basis. As for education-related uplink transmissions, they too seem appropriate to count toward the ITFS programming requirements. Other than traditional logging, we have no other suggestion on how such transmissions can be more practically measured.

In the event Mississippi EdNet and Wireless One adjust their lease agreement to accommodate a digital system, Mississippi ETV feels very strongly about the need to maintain the current ratio of ITFS to commercial channels (1:4). In that regard, stories exist of other ITFS licensees who have experienced coercive tactics by their wireless partner. Those tactics resulted in the post-digital ratio changing significantly to the disadvantage of the ITFS licensee. Consequently, we again want to emphasize the need for either FCC review and/or rulemaking concerning conversion from analog to digital ITFS systems.

Another potential problem concerning our Mississippi ITFS system is the shifting or trading of ITFS channels. From a programming perspective, it is crucial that viewers become accustomed to finding specific programs on specific channels. While EdNet's five ITFS program channels are not yet selected on a statewide basis, once they are, it would be counterproductive to make any major changes. EdNet would want to make certain that if such adjustments would be necessary to accommodate two-way systems and/or "cellularization," our wireless cable "partner" would commit the necessary financial resources to properly promote and inform all of EdNet's ITFS users.

As to how ITFS licensees should approach the disposition of equipment at the end of a lease agreement after "cellularization" has occurred, Mississippi ETV believes such specifics must be carefully addressed in the lease agreement. Such complex details further require the aid and assistance of the FCC, as a reviewer, before any lease agreements are completed. Mississippi EdNet would want to assure that any future lease agreement that includes "cellularization," include a guarantee of continued and uninterrupted operation of all of its ITFS channels in the event of a lease termination.

Again, regarding the review of such lease agreements, Mississippi ETV believes that both the ITFS licensee and the wireless cable "partner"

"should be required to file written agreements governing the ITFS licensee's lease of an ITFS programming channel, and the FCC's present requirements for excess capacity leases, including those dealing with control issues, length of lease, and rights on termination, should apply."

From Mississippi EdNet's perspective such FCC rules regarding lease agreement reviews have been beneficial.

In summary, Mississippi ETV welcomes any FCC rule changes which concurrently stimulate the growth of the wireless cable industry and provide for and protect the interests of Mississippi's five ITFS licensees who comprise Mississippi EdNet (four educational partners and EdNet itself). Educational service is our core offering. The proposed rule changes can greatly affect the direction of some of our most valued and effective distance learning programs in Mississippi. That is why we are committed to properly positioning our ITFS consortium, Mississippi EdNet. Please contact us if you have any questions. I will be happy to clarify any of the comments contained in this memorandum.